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Awareness and Attitude to Media Sensitisation Messages on Lassa Fever among Residents of Selected States in Southeast, Nigeria

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ABSTRACT

Background: Lassa fever is an acute viral haemorrhagic illness endemic to West Africa that is transmitted to humans through contact with food or household items contaminated by rodent excreta. This study examined awareness and attitude to media sensitisation messages regarding Lassa fever among residents of Southeast Nigeria. The research was directed by four objectives and associated research enquiries.

Method: A descriptive survey design was utilised, employing a structured questionnaire to gather data from residents in the selected states. The study population comprised 15,470,975 residents of selected states in Southeast Nigeria. From this population, a purposive sample of 384 respondents was drawn to assess residents' awareness, knowledge, and attitudes toward media sensitisation messages on Lassa fever among residents of selected states in Southeast Nigeria. The research questions were addressed using mean and standard deviation, while chi-square was utilised to evaluate the hypotheses.

Results: The results showed that media sensitisation had a moderately strong effect on residents' awareness (mean = 3.00, SD = 0.56), especially when it came to hygiene (mean = 3.07). However, residents were not very aware of how vulnerable healthcare workers were (mean = 2.89). The mean awareness score was 2.91, indicating favourable awareness levels among respondents. Chi-square analysis showed a statistically significant association between residents' awareness of Lassa fever transmission and their engagement in preventive behaviours, $\chi^2 = 802.166$, $p < .001$.

Conclusion: The study suggests ongoing and focused media campaigns, especially in rural areas with few resources, to lower the risk of transmission and improve health education

Keywords: Awareness, Behaviour, Knowledge, Lassa Fever, Media Sensitisation Messages, Residents, Practices

How to cite this article

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INTRODUCTION

Pathogenic microorganisms, including bacteria, viruses, and fungi, induce infectious diseases and parasites that infiltrate the body, proliferate, and result in illness.[1] Vectors, contaminated surfaces, food, or water can directly or indirectly transmit these diseases from one person to another.[2] Infectious diseases can be very different in how severe they are and how they affect people and communities. They are often a big worry for public health.[3] They are responsible for a substantial proportion of global morbidity and mortality, particularly in regions, countries where resources for healthcare, sanitation, and disease prevention may be limited. [4–6] However, like other infectious diseases, Lassa Fever (LF) poses a major public health risk, especially given the lack of a widely accessible vaccine and the challenges in diagnosing and treating the disease promptly.

Lassa fever is a prime example of an infectious disease, caused by the Lassa virus, a virus that belongs to the arenavirus family.[7] The number of Lassa fever cases in the country began to rise towards the end of November 2022.[8] As of May 2023, reports from 26 out of 36 states and the Federal Capital Territory (FCT) indicated a total of 4,702 suspected cases, five probable cases, and 877 confirmed cases during epidemiological weeks 1–15 of 2023 (week ending 16 April), alongside 152 deaths, resulting in a case fatality rate (CFR) of 17% (WHO)[9]

Thus, Usuwa et al.[10] assert that Lassa fever is a zoonotic disease prone to epidemics, with Ebonyi State identified as a high-burden location in Southeast, Nigeria. Unlike many infectious diseases that spread directly from human to human, Lassa fever's primary mode of transmission is zoonotic.[11,12] This means that it originates from an animal reservoir, specifically the Mastomys natalensis rat, which is commonly found in rural and urban-rural interface areas in West Africa.[13,14].

Though to a lesser extent, secondary human-to-human transmission can also occur through direct contact with the blood, secretions, organs or other body fluids of infected persons, especially in health-care settings. These rats contaminate food and household items through contact with their urine or faeces, typically by touching or eating such contaminated items.[15,16] This also occurs when people dry out grains in the open or process infected rats for food. Secondary transmission can also occur through direct contact with the bodily fluids of infected individuals, which increases the risk of outbreaks in healthcare settings. [17,18] The virus can cause a wide range of symptoms, from mild fever and tiredness to severe haemorrhagic fever, multi-organ failure, and even death in some cases. [19,20] The high frequency and ability to spread in areas where the disease is common put a lot of stress on healthcare systems. Roughly 80% of infestations are mild and asymptomatic; however, severe cases may advance to multi-organ dysfunction, neurological manifestations, and potentially fatal outcomes. [21] The rate of death among those admitted to hospitals may attain 15%, highlighting the disease's severity when left untreated.

The World Health Organisation (WHO) has made Lassa fever a priority, and efforts to fight it are in line with broader disease prevention and control strategies. These include raising public awareness, strengthening healthcare systems, developing and distributing diagnostic tools, and improving infection control protocols.[22] Because Lassa fever usually happens in the dry season, from January to April, it is important to control rodent populations, improve sanitation, and teach people how to avoid spreading the disease. [23.] Media outlets can teach Nigerians about how Lassa fever spreads, especially the dangers of being around Mastomys natalensis rats and the importance of keeping food and homes clean to avoid contamination.[10] It thrives in proximity to human dwellings and agricultural establishments, contaminating surfaces and food with urine and faeces that harbour the Lassa virus. The virus is more likely to be encountered by humans because it reproduces quickly and can live close to people. [24] Because this species poses a threat to public health, it is important to teach people about the specific risks that Mastomys natalensis poses. Media awareness campaigns are a good way to do this.

Mass Media sensitisation messages play a critical role in informing people about the importance of early symptoms of lassa fever, which often resemble common febrile illnesses but require prompt medical attention. The Media inform the public with the aetiology, manifestations, and transmission of Lassa fever, thereby diminishing ignorance and misconceptions.[25.] Awareness initiatives encourage sanitary practices, including appropriate food storage, rodent management, and personal cleanliness to avert transmission.,[26] Nonetheless, Ikwueze [27] demonstrated that media

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coverage substantially enhanced public awareness and health practices regarding Lassa fever. On the other hand, studies conducted in rural or epidemic contexts yielded different results. Awosanya[28], along with studies [29] and [30], showed that people have inadequate awareness and insufficient knowledge about symptoms, reservoirs, and ways to stop them from happening. The results show that media penetration and effectiveness are inconsistent. The evidence shows that we need to use communication methods that are tailored to the needs of rural and high-risk communities and that are based in the community to get people involved and make sure that the programmes last.

Mass media campaigns facilitate prompt detection and therapy by informing persons about symptoms, hence reducing mortality rates.[31] Media sensitisation messages can expedite the distribution of information during epidemics, educating individuals on safety practices and alleviating panic. Media initiatives confront stigma associated with affected persons, encouraging those in need of medical care. Media sensitisation efficiently reduces the knowledge gap, encourages preventive measures, and improves healthcare responses, making it crucial for the management of Lassa fever.

Fatiregun et al. [32] showed significant awareness but inadequate knowledge of Lassa fever prevention in Ondo State, but Abdulkadir and Mohammed [33] noted that educational attainment significantly impacted knowledge in Northeastern Nigeria. Consequently, studies conducted in Nigeria yield conflicting results. Studies [34], [27], and [35] established that media campaigns enhanced knowledge and practices regarding the Lassa virus, but studies [36] and [37] revealed insufficient awareness, emphasising the necessity of culturally adapted communication. Additionally, accurate media reporting helps stop the spread of false information, which can spread quickly and change how people act, especially during outbreaks.

Lassa fever has long been an issue in Southeast Nigeria, particularly in regions such as Ebonyi, Imo, and Enugu, which have recently reported numerous cases. The region's vulnerabilities stem from natural challenges, such as inadequate sanitation and rodent infestations, as well as cultural behaviours, including the consumption of bush meat. Efforts to combat Lassa fever include public health campaigns, enhanced surveillance, and the establishment of treatment centres. Nevertheless, the disease remains prevalent due to issues such as restricted access to healthcare, poverty, inadequate waste management, and insufficient knowledge. [38]

Recent outbreaks of Lassa fever have occurred more frequently in Nigeria. The media have launched a sensibilization drive to educate the public on prevention and control strategies for Lassa fever epidemics.[39] The objective of the media sensitisation messaging is to encourage individuals to adopt preventive measures, such as improved hygiene, enhanced rodent control, and seeking medical assistance promptly upon observing symptoms.[40] Despite these efforts, various stakeholders, including the media, have reported a minimal level of success in achieving these objectives. Consequently, it is essential to evaluate awareness and attitudinal reactions to media sensitisation messages regarding Lassa fever in Nigeria, especially among the residents of the Southeast. The study sought to offer significant insights that could guide public health actions and evaluate the overall response to the Lassa fever in Southeast Nigeria.

Awareness campaigns regarding Lassa fever in Nigeria, specifically targeting the residents of the South East region. The objective of the study is to evaluate awareness and response to media sensitisation messages on Lassa Fever among residents of selected States in Southeast, Nigeria. This study examined residents' awareness**,** knowledge**,** and attitudes **r**egarding Lassa fever in relation to media sensitisation messages in selected states of Southeast Nigeria. The study tested whether there is a significant association between residents' level of awareness of Lassa fever and their attitudes toward media sensitisation messages in selected states of Southeast Nigeria.

METHOD

Study Design and Population

A descriptive survey design was employed to investigate residents' awareness, attitudes, and practices regarding media messages about Lassa fever in Southeast Nigeria. This design facilitated systematic data collection from a representative sample without altering study variables. The population included residents from three intentionally selected states—Ebonyi, Enugu, and Imo—with a total projected population of 15,470,975. (*City Population)*[41].

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Sample Size and Sampling Procedure

A sample size of 384 respondents was determined using Cochran's formula for large populations (Z = 1.96, p = 0.5, margin of error = 0.05). A multi-stage sampling approach was employed: (1) three states were purposively selected; (2) one senatorial zone was randomly chosen from each state; (3) three local government areas (LGAs) were randomly selected from each senatorial zone, giving a total of nine LGAs; (4) The unit sample size for the nine local Government Area (LGA) was obtained using the Bowley's[42] proportional sampling technique and the following calculation. These produced allocations ranging from 32 to 66 respondents per LGA, totalling 384 participants.

Table 1: Population Projections and Sample Distribution by LGA and Community in Selected South-East States (2023)

S/N	State	Population (2006)	Population (2023)	Senatorial Districts	LGA	Population of LGA	Communities	Sample Size of Each LGA
1.	Ebonyi State	2,176,947	4,007,155	Ebonyi Central	Ikwo	320,200	Inyimagu	57
					Ishielu	227,300	Ezillo	41
					Ezza North	217,700	Okoffia	39
2.	Enugu State	3,267,837	5,396,098	Enugu North	Uzouwani	182,500	Adani	32
						256,500	Obollo-eke	46
					Udenu	371,500	Enugu-ezike	66
					Igboeze North			
3.	Imo State	3,927,563	6,067,722	Imo West	Nwangele	177,500	Ununakara	32
					Ehime Mbano	181,500	Umukabia	32
					Ideato South	221,900	Umueshi	39
			15,470,975			2,156,600		*384*

LGA – Local Government Area

Source: Population projection by City Population (2022)[41]

$$\frac{UP \times TSS}{TP} = SS$$

Where:

UP = Unit Population
TSS = Total Sample Size
TP = Total Population (2,156,600)
SS = Sample Size (384)

Data Collection and Analysis

Data was gathered through a structured questionnaire designed to evaluate individuals' knowledge, perceptions, and behaviours regarding Lassa fever media messages. Content validity was confirmed by three university experts from mass communication and public health who reviewed the instrument for clarity, relevance, and alignment with the study objectives. Reliability was established through a pilot study in which the questionnaire was administered to a pilot sample and analysed using SPSS; Cronbach's alpha yielded a coefficient of $\alpha = 0.872$, indicating high internal consistency. In-person data collection was conducted by the researcher and trained assistants. Analyses were performed using SPSS version 22, employing descriptive statistics (mean and standard deviation) for the research questions and chi-square tests to assess relationships between categorical variables. A criterion mean of 2.50 on a 4-point scale indicated consensus.

Ethical Approval

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The researchers obeyed the ethical rules that are known for studies that involve humans. To protect privacy, no information that could identify a person was collected. Before they took part in the study, participants were fully informed of its goals, and their consent was properly obtained. The Research Ethics Committee of the Department of Mass Communication at the University of Nigeria, Nsukka, gave ethical approval (Approval No: UN/FA/FAREC/01012024, dated 17 October 2024).

RESULTS

Research Question One: What is the level of awareness about Lassa fever in relation to media sensitisation messages among residents of selected states in Southeast Nigeria?

Table 2: Mean responses on the level of awareness about Lassa fever in relation to media sensitization messages among residents of selected states in Southeast Nigeria

S/n	Item Statement	SA	A	D	SD	Mean $\bar{X}$	Std.Dev SD
1	I have heard what Lassa fever is and its potential health impact.	132 (37.8%)	131 (37.5%)	50 (14.3%)	36 (10.3%)	3.03	0.97
2	I heard Lassa fever is caused by a virus.	127 (36.4%)	134 (38.4%)	60 (17.2%)	28 (8%)	3.03	0.93
3	I heard rats are the primary carriers of Lassa fever.	112 (32.1%)	151 (43.3%)	51 (14.6%)	35 (10%)	2.97	0.93
4	I can identify the symptoms of Lassa fever.	121 (34.7%)	142 (40.7%)	54 (15.5%)	32 (9.2%)	3.01	0.93
5	I have received information about Lassa fever from healthcare professionals	125 (35.8%)	139 (39.8%)	45 (12.9%)	40 (11.5%)	3.00	0.97
6	I heard that bleeding from body parts is a potential symptom of severe Lassa fever.	136 (38.9%)	130 (37.2%)	49 (14%)	34 (9.7%)	3.05	0.96
7	I recall specific messages or advice about Lassa fever prevention from media sources.	138 (39.5%)	131 (37.5%)	45 (12.9%)	35 (10%)	3.07	0.96
	Cluster Mean					**3.02**	**0.95**

Note N=Number of respondents, Mean = $\bar{X}$, Standard Deviation=SD, Strongly Agree=SA, Agree=A, Disagree=D, Strongly Disagree, SD

Table 2 shows a total mean of 3.02 and a standard deviation of 0.95, indicating high general awareness of Lassa fever due to media messages. Item analysis reveals consistent patterns: most respondents knew what Lassa fever is (M = 3.03) and that it is caused by a virus (M = 3.03). Awareness that rats are the main carriers was slightly lower (M = 2.97) but still positive. Knowledge of symptoms was high (M = 3.01), though more emphasis on symptom identification is needed. Information received from healthcare professionals (M = 3.00) was relevant but less influential than media. Awareness of severe symptoms, such as bleeding (M = 3.05), and recall of preventive messages (M = 3.07) were both strong. Overall, awareness levels across Southeast Nigeria were high, driven mainly by media sensitization. The low standard deviations (0.93–0.97) indicate consistent responses and stable awareness across the population.

Research Question Two: What is the extent of knowledge about Lassa fever among residents of selected states in Southeast Nigeria?

Table 3: Mean responses on the extent to which residents' knowledge of Lassa fever transmission, symptoms, and prevention is influenced by media messages in selected states in Southeast Nigeria.

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S/n	Item Statement	VHE	HE	LE	VLE	Mean $\bar{X}$,	Std.Dev SD
8	I know that Lassa fever can spread through contaminated food and water.	133 (38.1%)	123 (35.2%)	57 (16.3%)	36 (10.3%)	3.01	0.98
9	I understand that Lassa fever can be transmitted from person to person.	119 (34.1%)	145 (41.5%)	58 (16.6%)	27 (7.7%)	3.02	0.90
10	I know some of the measures to prevent Lassa fever (e.g., proper food storage, avoiding rats).	139 (39.8%)	126 (36.1%)	50 (14.3%)	34 (9.7%)	3.06	0.96
11	I know the importance of good hygiene in preventing Lassa fever.	134 (38.4%)	129 (37.0%)	64 (18.3%)	22 (6.3%)	3.07	0.90
12	I do know Lassa fever is transmitted through bodily fluids.	130 (37.2%)	125 (35.8%)	54 (15.5%)	40 (11.5%)	2.99	0.99
13	I know that feverish condition is one of the symptoms associated with Lassa fever	114 (32.7%)	138 (39.5%)	58 (16.6%)	39 (11.2%)	2.94	0.97
14	I know that healthcare workers are vulnerable to contracting Lassa fever.	107 (30.7%)	141 (40.4%)	55 (15.8%)	46 (13.2%)	2.89	0.99
	Cluster Mean					**3.00**	**0.96**

Note N=Number of respondents, Mean= $\bar{X}$, standard Deviation=SD, Very High Extent=VHE, High Extent= HE, Low Extent= LE, Very Low Extent, VLE

Table 3 reveals that media sensitisation plays a significant role in shaping residents' knowledge of Lassa fever transmission, symptoms, and prevention in Southeast Nigeria. The overall mean score of 3.00 (SD = 0.96) indicates a moderate to high level of media influence. The most substantial impact was observed in knowledge about hygiene (M = 3.07), preventive practices such as proper food storage and avoiding rats (M = 3.06), and person-to-person transmission (M = 3.02). Awareness of indirect transmission through contaminated food and water was also high (M = 3.01). Moderate awareness was seen regarding transmission via body fluids (M = 2.99), while weaker areas included recognition of fever as a symptom (M = 2.94) and understanding healthcare workers' vulnerability (M = 2.89). The narrow range of standard deviations (0.90–0.99) suggests consistent responses across participants. Overall, media campaigns have been effective in promoting preventive and hygiene-related knowledge but need to strengthen messaging on symptom recognition and occupational risks.

Research Question Three: What are residents' attitudes toward media Sensitisation messages on Lassa fever among residents of selected states in Southeast Nigeria?

Table 4: Mean responses on the resident attitudes toward media Sensitisation messages on Lassa fever among residents of selected states in Southeast Nigeria.

S/n	Item Statement	SA	A	D	SD	Mean $\bar{X}$	Std.Dev SD
15	I find the media messages about Lassa fever to be clear and easy to understand.	128 (36.7%)	156 (44.7%)	41 (11.8%)	24 (6.9%)	3.11	0.88
16	I believe media messages about Lassa fever are timely and helpful	119 (34.1%)	143 (41.0%)	53 (15.2%)	34 (9.7%)	2.99	0.96
17	I feel confident in acting on the information shared through media campaigns about Lassa fever.	102 (29.2%)	139 (39.8%)	61 (17.5%)	47 (13.5%)	2.87	1.00
18	I believe media messages on Lassa fever address the concerns of people like me.	87 (24.9%)	138 (39.5%)	72 (20.6%)	52 (14.9%)	2.77	1.01
19	I think the media over emphasizes the risks of Lassa fever, causing unnecessary fear.	62 (17.8%)	101 (28.9%)	106 (30.4%)	80 (22.9%)	2.45	1.01

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S/n	Item Statement	SA	A	D	SD	Mean $\bar{X}$	Std.Dev SD
20	I feel the media should do more to include interactive programs (e.g., Q & A sessions) on Lassa fever.	141 (40.4%)	138 (39.5%)	42 (12.0%)	28 (8.0%)	3.12	0.92
21	I feel media messages have helped me understand the symptoms and transmission of Lassa fever.	126 (36.1%)	145 (41.5%)	48 (13.8%)	30 (8.6%)	3.05	0.91
	Cluster Mean					**2.91**	**0.96**

Note N=Number of respondents, Mean = $\bar{X}$, Standard Deviation=SD, Strongly Agree=SA, Agree=A, Disagree=D, Strongly Disagree, SD

Table 4 reveals that residents in selected Southeastern Nigerian states generally exhibit positive attitudes toward media sensitization messages on Lassa fever. The high mean score for message clarity (M = 3.11) with low variability indicates that the information was well communicated and easy to understand. Messages were also perceived as timely and useful (M = 2.99), though this slightly lower score suggests potential delays or limited media reach in some areas. Participants were only moderately confident in acting on the information (M = 2.87). This result shows that there was a gap between being aware of something and feeling about it. This phenomenon could be because the instructions weren't clear, people weren't sure if they were credible, or they couldn't get to the information. Furthermore, only a minor percentage (24.9%) strongly concurred that their personal concerns were addressed (M = 2.77), indicating the necessity for more culturally sensitive and audience-specific communication. The overall mean (M = 2.91) shows that most people had positive views, but there were also some who had different experiences. The most support was for interactive communication.

Hypothesis One:

Ho_1: There is no significant association between the level of awareness about Lassa fever and residents' attitudes toward media sensitisation messages on Lassa fever among residents of selected states in Southeast Nigeria.

Table 5: Chi-Square Test

Statistics	Value	Df	Asymp.Sig.
Chi-Square	812.146a	42	0.000

Decision Rule:

The chi-square test result for Hypothesis One (H01) revealed a statistically significant association between residents' level of awareness of Lassa fever and their attitude toward media sensitisation messages in Southeast Nigeria. The test produced a Chi-Square value of 812.146 with an asymptotic significance (p-value) of 0.000, which is lower than the standard threshold of 0.05. This indicates that the observed association is unlikely to have occurred by chance. Consequently, the null hypothesis H01: There exists no significant relationship between awareness and attitude toward media messages) was rejected. The finding implies that residents with a higher awareness of Lassa fever tend to have more positive attitudes towards media sensitisation campaigns.

DISCUSSION

The study revealed a generally high level of awareness of Lassa fever, with strong recall of preventive messages (M = 3.07) and good knowledge of symptoms and the viral cause. Media sensitisation was found to significantly enhance residents' cognitive awareness of the disease. This finding aligns with Ikwueze [27], who reported that broadcast media in Enugu State significantly influenced awareness and health behaviours related to Lassa fever, confirming the media's central role in improving public health literacy. However, the present findings contrast with those of Ilesanmi et al.[30], whose study in a rural Ondo community showed poor awareness before a sensitisation seminar, indicating weak media penetration. Similarly, Oladeinde et al. [29] found that only 7.4% of respondents in rural Edo State had heard of Lassa fever, revealing limited public enlightenment in remote areas. These disparities highlight the uneven impact of media campaigns between urban and rural settings. While media sensitisation effectively raises awareness and promotes preventive behaviours, its influence remains constrained in rural regions by poor infrastructure, cultural barriers, and inconsistent messaging. Therefore, sustained behavioural change requires integrating mass media campaigns with grassroots communication strategies that are locally tailored and culturally sensitive.

The study found that media sensitisation had a moderately high influence on residents' knowledge of

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Lassa fever transmission, symptoms, and prevention (M = 3.00). Knowledge was strongest regarding hygiene practices (M = 3.07) but lowest on healthcare workers' vulnerability (M = 2.89), highlighting a gap in risk communication for specific groups. These findings align with Fatiregun et al. [32], who reported high awareness among Ondo State residents but inadequate understanding of preventive measures, particularly among young, less educated males. In contrast, Awosanya [28] found limited knowledge of Lassa fever symptoms, reservoirs, and prevention, suggesting weaker media engagement during earlier outbreaks. Similarly, Usuwa et al.[10] noted uneven knowledge and poor risk perception in Ebonyi State, urging improved communication targeting younger populations and males—an observation consistent with the current study's findings. Abdulkadir and Mohammed [33] also support this, showing that Lassa fever awareness correlates with education levels in North-Eastern Nigeria, emphasizing that literacy enhances the impact of media messages. Collectively, these studies indicate that while media sensitisation has strengthened public understanding of Lassa fever, persistent gaps remain in recognising occupational risks and reaching vulnerable groups such as rural dwellers, young males, and individuals with limited education.

The study revealed that residents generally held positive attitudes toward Lassa fever media messages (M = 2.91). Respondents found the messages clear and understandable (M = 3.11) and showed strong interest in more interactive formats (M = 3.12). However, perceptions were mixed regarding message relevance to personal concerns (M = 2.77) and fear-inducing content (M = 2.45). These findings align with, Ikwueze [27] who found that media campaigns in Enugu State significantly shaped attitudes and behaviours toward the disease, confirming the role of well-designed media content in fostering engagement. Asuke et al.[35] also observed commendable attitudes among healthcare workers in Kaduna, emphasizing that consistent and targeted communication encourages positive reception—consistent with the current study's outcomes. Likewise, Odionye et al., [34] found the mass media's effectiveness in promoting preventive attitudes, though they stressed the value of supplementing mass campaigns with interpersonal communication. In contrast, Aromolaran et al. [37] and Olowookere et al. [36] reported lower understanding and mixed attitudes in rural areas, likely due to poor message tailoring, limited media reach, or demographic differences. Overall, the present findings reinforce that accessible, participatory, and context-sensitive media communication is crucial for sustaining positive public attitudes toward Lassa fever prevention.

Strengths and limitation of the study

This study enhances existing research on public health communication and prevention of infectious diseases by offering context-specific findings about media sensitization, Lassa fever awareness and attitude in South-east Nigeria. A significant strength is in its analysis of both governmental and social media communications, a domain that has garnered less empirical scrutiny in the States. The incorporation of participants from both urban and rural areas enhanced the diversity of opinions obtained. The study was confined to specific states in southeast Nigeria, perhaps limiting the generalisability of the findings to other parts of the state. The cross-sectional design further restricts its capacity to deduce causality between media sensitisation and changes in knowledge or attitude.

Implication of the findings

The findings demonstrate that media sensitisation constitutes a successful public health communication approach for improving awareness, knowledge, and attitudes towards Lassa fever. Public health experts and risk communication experts should improve targeted communications, specifically addressing the vulnerability of healthcare personnel and high-risk groups. The demand for transparent, straightforward, and engaging communication forms suggests that media tactics prioritising audience involvement and participation are essential for enhancing behavioural compliance and sustaining preventative behaviours over time.

The study also contributes to the existing literature on public health communication as well as media influence in epidemic management by demonstrating how media sensitisation might impact illness awareness and attitudes in resource-limited environments. The identified shortcomings in risk perception, particularly regarding occupational vulnerability and individual relevance, highlight the need for further theoretical and empirical research on how to frame messages, segment the audience, and determine the effectiveness of frightening appeals in public health initiatives.

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CONCLUSION

This study revealed that media sensitisation markedly enhanced public awareness, knowledge, and preventive measures concerning Lassa fever among residents in South-east Nigeria. Media efforts improved awareness of symptoms, hygiene initiatives, and the infectious cause of the disease while promoting generally favourable attitudes towards preventative health communication. While respondents deemed the messages straightforward and comprehensible, there was a pronounced inclination towards more captivating styles. Attitudinal change was more pronounced with regard to hygiene initiatives than in culturally ingrained habits like rodent intake, suggesting that awareness alone may be inadequate to alter deeply entrenched patterns. In light of these findings, it is advised that public health campaigns progress from mere awareness to including culturally attuned, community-oriented behaviour modification campaigns. Message content must be rendered more interestingly and pertinent to local contexts, while reducing fear-based communication to enhance trust and encourage ongoing involvement.

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REFERENCES

1. Verhoef J, van Kessel K, Snippe H. Immune response in human pathology: infections caused by bacteria, viruses, fungi, and parasites. In Nijkamp and Parnham's Principles of Immunopharmacology 2019 (pp. 165-178). Cham: Springer International Publishing. doi.org/10.1007/978-3-030-10811-3_10
2. Sarwar M. Insect vectors involving in mechanical transmission of human pathogens for serious diseases. International Journal of Bioinformatics and Biomedical Engineering, 2015; 1(3): 300-306.
3. Peres MA, Macpherson LM, Weyant RJ, Daly B, Venturelli R, Mathur MR, et al. Oral diseases: a global public health challenge. Lancet. 2019;394(10194):249–60.
4. Bhutta ZA, Sommerfeld J, Lassi ZS, Salam RA, Das JK. Global burden, distribution, and interventions for infectious diseases of poverty. Infect Dis Poverty. 2014; 3:1–7.
5. Frenkel LD. Infectious diseases as a cause of global childhood mortality and morbidity: progress in recognition, prevention, and treatment. Adv Pediatr Res. 2018;5(14):1–11.
6. Prüss-Ustün A, Wolf J, Bartram J, Clasen T, Cumming O, Freeman MC, et al. Burden of disease from inadequate water, sanitation and hygiene for selected adverse health outcomes: an updated analysis with a focus on low- and middle-income countries. Int J Hyg Environ Health. 2019;222(5):765–77.
7. World Health Organization (WHO). Lassa fever: fact sheet. Geneva: WHO; 2017. Available from: https://www.who.int/en/news-room/fact-sheets/detail/lassa-fever (accessed 6 Sep 2024).
8. Aloke C, Obasi NA, Aja PM, Emelike CU, Egwu CO, Jeje O, et al. Combating Lassa fever in West African sub-region: progress, challenges, and future perspectives. Viruses. 2023;15(1):146.
9. World Health Organization. Disease Outbreak News: Lassa fever – Nigeria [Internet]. Geneva: WHO; 2023. Available from: https://www.who.int/emergencies/disease-outbreak-news/item/2023-DON463
10. Usuwa IS, Akpa CO, Umeokonkwo CD, Umoke M, Oguanuo CS, Olorukooba AA, et al. Knowledge and risk perception towards Lassa fever infection among residents of affected communities in Ebonyi State, Nigeria: implications for risk communication. BMC Public Health. 2020; 20:1–10.
11. Redding DW, Moses LM, Cunningham AA, Wood J, Jones KE. Environmental-mechanistic modelling of the impact of global change on human zoonotic disease emergence: a case study of Lassa fever. Methods Ecol Evol. 2016;7(6):646–55.
12. Asogun DA, Günther S, Akpede GO, Ihekweazu C, Zumla A. Lassa fever: epidemiology, clinical features, diagnosis, management and prevention. Infect Dis Clin North Am. 2019;33(4):933–951.
13. Hima K, Houémenou G, Badou S, Garba M, Dossou HJ, Etougbétché J, et al. Native and invasive small mammals in urban habitats along the commercial axis connecting Benin and Niger, West Africa. Diversity. 2019;11(12):238.
14. Mlowe G, Katakweba A, Makundi I, Sabuni C. An assessment of rodents and insectivores' diversity and abundance, Unguja, Zanzibar, Tanzania. Sustainability Biodivers Conserv. 2023;2(1):29–55.
15. Douno M, Asampong E, Magassouba NF, Fichet-Calvet E, Almudena MS. Hunting and

Print ISSN: 0189-9287 Online ISSN: 2992-345X

consumption of rodents by children in the Lassa fever endemic area of Faranah, Guinea. PLoS Negl Trop Dis. 2021;15(3):e0009212.
16. Ndenda JP, Njagarah JBH, Shaw S. Influence of environmental viral load, interpersonal contact and infected rodents on Lassa fever transmission dynamics: perspectives from fractional-order dynamic modelling. AIMS Math. 2022; 7:8975–9002.
17. World Health Organization (WHO). Lassa fever — Nigeria. 2017. Available from: https://www.who.int (accessed 4th November 2024).
18. Dalhat MM, Olayinka A, Meremikwu MM, Dan-Nwafor C, Iniobong A, Ntoimo LF, et al. Epidemiological trends of Lassa fever in Nigeria, 2018–2021. PLoS One. 2022;17(12):e0279467.
19. Akpede GO, Lawal W. Viral haemorrhagic fevers (VHF) with particular focus on Lassa and Ebola. In: Paediatric and Child Health in a Tropical Region. 2016. p. 625–656.
20. Alile SO. A supervised machine learning approach for diagnosing Lassa fever and viral hemorrhagic fever types reliant on observed signs. Asia-Pac J Sci Technol. 2022;27(04):1–16.
21. Mateer EJ, Huang C, Shehu NY, Paessler S. Lassa fever–induced sensorineural hearing loss: a neglected public health and social burden. PLoS Negl Trop Dis. 2018;12(2):e0006187.
22. Uppala PK, Karanam SK, Kandra NV, Edhi S. Lassa fever: A comprehensive review of virology, clinical management, and global health implications. World Journal of Virology. (2025);14(3),108405. doi: 10.5501/wjv.v14.i3.108405
23. Izah SC, Ovuru KF, Ogwu MC. Lassa fever in Nigeria: social and ecological risk factors exacerbating transmission and sustainable management strategies. Int J Trop Dis. 2022;5(2):065. doi. org/10.23937/2643-461X/1710065
24. Fichet-Calvet E, Rogers DJ. Risk maps of Lassa fever in West Africa. PLoS Negl Trop Dis. 2009;3(3):e388. doi: 10.1371/journal.pntd.0000388.
25. Aondowase S, Udoudom UI, Pam C. Mass media and health communication messages: implications for rural development in 21st century Nigeria. Int J Educ Manag Technol. 2023;1(1):11–26.
26. Issae A, Chengula A, Kicheleri R, Kasanga C, Katakweba A. Knowledge, attitude, and preventive practices toward rodent-borne diseases in Ngorongoro district, Tanzania. J of Public Health in Afr. 2023:14(6):2385. doi: 10.4081/jphia.2023.2385
27. Ikwueze IA. Influence of media campaigns on the level of attitude and practice of Lassa fever risk factors, prevention and treatment behaviour of Enugu State residents. Interdiscip J Linguist Market Commun. 2023;10(3):102–16.
28. Awosanya EJ. Post-epidemic awareness and knowledge of Lassa fever among residents in affected community in Ibadan, Oyo State, Nigeria. Vet World. 2018;11(8):1059–63.
29. Oladeinde BH, Omoregie R, Odia I. Public awareness of Lassa fever in three rural communities of Nigeria. Int J Health Promot Educ. 2014;53(3):128–35.
30. Ilesanmi O, Omotoso B, Alele F, Adewuyi P. Awareness of Lassa fever in a rural community in South West Nigeria. J Community Health Res. 2015;4(1):1–10.
31. Ponikowski P, Anker SD, AlHabib KF, Cowie MR, Force TL, Hu S, et al. Heart failure: preventing disease and death worldwide. ESC Heart Fail. 2014;1(1):4–25.
32. Fatiregun A, Isere E, Dosumu M, Agunbiade O, Onyibe R. Lassa fever awareness and knowledge among community residents in Ondo State, Nigeria. J Community Med Prim Health Care. 2019;31(2):26–35.
33. Abdulkadir S, Mohammed AS. Assessment of knowledge of Lassa fever among residents in North Eastern Nigeria. Int J Heal Sci Res. 2019;9(2):197–202.
34. Odionye CM, Anorue LI, Ekwe O. A knowledge, attitude and practice (KAP) analysis of Lassa fever media campaigns among residents of South-East Nigeria. Afr Popul Stud. 2019;33(1):4738–49.
35. Asuke S, Agubamah E, Ibrahim MS, Ovosi JO. Knowledge, attitude, and practice toward Lassa fever prevention and control among health care providers in Sabon Gari LGA, Kaduna State, Nigeria. J Med Trop. 2020;22(1):1–7.
36. Olowookere SA, Adegbenro CA, Idowu A, Omisore AG, Shabi OM, Ikem UR, et al. Knowledge, attitude and practices toward Lassa fever control and prevention among residents of Ile-Ife, Southwest Nigeria. Int Q Community Health Educ. 2017;37(2):107–12.
37. Aromolaran O, Samson TK, Falodun OI. Knowledge and practices associated with Lassa fever in rural Nigeria: implications for prevention and control. J Public Health Afr. 2023;14(9):1–11.
38. Kamara ABS, Fatoma P, Moseray A. The perspectives of healthcare professionals on the

Print ISSN: 0189-9287 Online ISSN: 2992-345X

strategies, challenges, and community responses to health system response and interventions towards Lassa fever infections and mortality in Sierra Leone. Risk Manag Healthc Policy. 2024:1127–49.

39. Umeokonkwo C, Kihembo C, Brian, HK, Antara S. Proceedings of the 2023 AFENET Scientific Conference. J. Interv. Epidemiol. Public Health. 2024. 7(1). doi: 10.11604/JIEPH.supp.2024.7.2.1437
40. Ibrahim M L, Sawyerr HO, Opasola OA, Adiama YB, Raimi MO. Bridging Knowledge and Practice Gaps in Lassa Fever Prevention: Awareness, Attitudes, and Infection Control Measures Among Healthcare Workers and Residents in Edo, Ondo, and Kwara States. JMIR Preprints, 2025: 30(03)
41. City Population of Imo State (Nigeria): Administrative Division. 2022 [cited 2024 Nov 8. Available from: https://citypopulation.de/en/nigeria/admin/NGA017__imo/ City Population. Ebonyi State (Nigeria): Administrative Division. 2022 [cited 2024 Nov 8]. Available from: https://citypopulation.de/en/nigeria/admin/NGA011__ebonyi/
42. Bowley AL. Measurement of the precision attained in sampling. Bull Int Stat Inst. 1926; XII(Book 1):6–62.

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